

IV. REMARKS

1. Claims 3-17 and 19-22 remain in the application. Claims 1, 2, and 18 have been cancelled without prejudice. Claims 14, 19, 20, and 21 have been amended.

Support for the amendments may be found, for example, in paragraphs [0010] and [0034]-[0037] of the present specification.

2. Applicants appreciate the indication that claim 15 is allowed and that claims 11 and 16 would be allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims. However, Applicants believe that claims 11 and 16 are patentable as they stand for the reasons stated below.

3. Applicants respectfully submit that claims 14, 19, 20, and 21 are not anticipated by Rosenfeldt et al. (US 6,606,158, "Rosenfeldt") under 35 USC 102(a).

Rosenfeldt fails to disclose or suggest a composite signal having superimposed signals delayed with respect to each other and that interfere with each other, as recited by claims 14, 19, 20, and 21. In fact, Rosenfeldt teaches away from this feature.

Rosenfeldt describes a polarization delay unit 102 that splits an input beam with a polarization beam splitter 104, imposes a delay 108 on one path and recombines the paths with a second polarization beam splitter 106. The polarization of both beams is preserved so that the beams are orthogonal and do not interfere as stated in column 10, lines 1-7. As a result the

composite signals being input to the DUT do not form an interference pattern. The aim of Rosenfeldt is to obtain independent DUT responses at different polarizations. The response from each DUT is superimposed with light from a local oscillator in order to obtain interference patterns, not the input to the DUT. Due to the different propagation delays of the input polarizations, the responses of the two polarizations are separated in the electrical spectrum (see column 10, lines 15-30).

In contrast, in the present claims, the superimposed signals that are input to the DUT interfere with each other. One aspect is to provide the interference pattern to the DUT and to examine how the interference pattern is affected by the DUT as described, for example, in paragraphs [0010] and [0034] - [0037] of the present specification. Thus, the interference pattern is dependent on the sweep speed of the tunable light source, e.g. being represented as distinct lines in the spectrum. The spectral lines are shifted by the DUT; the shift may indicate optical properties of the DUT.

At least for these reasons, Applicants submit that Rosenfeldt does not anticipate claims 14, 19, 20, and 21.

4. Applicants respectfully submit that claims 3-10, 12, 13, 17 and 22 are patentable over the combination of Rosenfeldt in view of Szfraniec et al. (US 6,486,691, "Szfraniec") under 35 USC 103(a).

Applicants' attorney respectfully submits that the present application and Szfraniec (US 6,486,961) were, at the time the invention of the present application was made, owned by Agilent

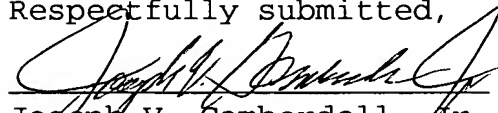
Technologies, Inc. of Palo Alto, CA, and that Szfraniec is not a valid reference under 35 USC 103(c).

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of \$120.00 is enclosed for a one (1) month extension of time.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


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28 April 2006
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